

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Original): A process for preparing polyisobutene having a number-average molecular weight of from 400 to 50 000 and a content of methyldiene groups of more than 50 mol%, in which

- a) isobutene is polymerized in the presence of a catalyst which comprises a halogenated Lewis acid,
- b) the catalyst is removed and/or deactivated, and
- c) the resulting polyisobutene is contacted with a zeolite of an average pore size of from 5 to 15 Å.

Claim 2 (Original): The process according to claim 1, in which the isobutene is polymerized in the presence of a diluent to obtain a solution of the polyisobutene in the diluent, and the solution of the polyisobutene is contacted with the zeolite.

Claim 3 (Currently Amended): The process according to claim 1 [[or 2]], in which the polyisobutene or the solution of the polyisobutene is also contacted with an acid scavenger which is selected from bases, nitrile compounds and immobilized bases.

Claim 4 (Original): The process according to claim 3, in which the base is selected from ammonia and organic amines.

Claim 5 (Original): The process according to claim 3, in which the nitrile compound is selected from acetonitrile, propionitrile and benzonitrile.

Claim 6 (Original): The process according to claim 3, in which the immobilized base is selected from alumina and alumina which is doped with hydroxides, oxides, carbonates, hydrogencarbonates and/or cyanides.

Claim 7 (Currently Amended): The process according to ~~any of the preceding claims~~ claim 1, in which the water content of the polyisobutene or of the solution of the polyisobutene is reduced to less than 10 ppm before the zeolite treatment.

Claim 8 (Original): The process according to claim 7, in which the water content is reduced by contacting the polyisobutene or the solution of the polyisobutene with a zeolite of an average pore size of 4 Å or less.

Claim 9 (Currently Amended): The process according to ~~any of claims 2 to 7~~ claim 2, in which the Lewis acid is boron trifluoride.

Claim 10 (Currently Amended): The process according to ~~any of claims 2 to 9~~ claim 2, in which the diluent comprises C<sub>4</sub> hydrocarbons other than isobutene.

Claim 11 (Currently Amended): The process according to ~~any of claims 3 to 9~~ claim 3, in which the isobutene is polymerized in the presence of a diluent to obtain a solution of the polyisobutene in the diluent and, before the contacting with the zeolite, the diluent is removed fully or partly or replaced by isobutene oligomers.